

Work Order ID 84097***84097***

Page 1

Wednesday, May 02, 2012 2:42:39 PM

Item ID: D3499-2

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Mounting Plate

Start Date: 5/2/2012 Start Qty: 8.00

8

Cust Item ID:

Required Date: 5/8/2012 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals:

Process Plan: Date: 12-05-7 Tooling: Date: Run Start ***NR1***QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3499	Rev C					(10)			

100

0.00

100

FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3499

6061, 128

Dwg Rev: CProg Rev: C

2-Deburr if necessary

110

0.00

110

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

120

0.00

120

QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

8/17/07

(10)

B12-5-6

B12-5-C

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

84097

Wednesday, May 02, 2012 2:42:40 PM

N900040100

Setup Start *NS1*

Stop ***NS2***

g

8

Reference:

Run Start *NR1*

Stop ***NR2***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

130

130

Small Fab

0.00

Deburr if ~~necessary~~.

140

NC BRAKE

Memo

Bend as per Dwg D3499

150

QC5- Inspect part completeness to step on W/O

Memo

Quality Control

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Work Order ID 84097

84097

Page 3

Wednesday, May 02, 2012 2:42:40 PM

Item ID: D3499-2 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Mounting Plate
 Start Date: 5/2/2012 Start Qty: 8.00 *8* Cust Item ID:
 Required Date: 5/8/2012 Req'd Qty: 8.00 *8* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Chemical Conversion Coat per QSI005 4.1	0.00							
160									
HandFinish	Memo	0.00							
Hand Finishing									
170	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
170									
Powdercoat	Memo	0.00							
Powder Coating	START TIME: 7:45 OVEN TEMPERATURE: 320 OF FINISH TIME: 8:15								
180	QC3- Inspect Part Finish	0.00							
180									
QC	Memo	0.00							
Quality Control									

(10) 26125-10

10X 11-12/05/14

M121134

10X d 11-12/05/14

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Work Order ID 84097

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84097

Page 4

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Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	Identify as per dwg & Stock Location: <u>166</u>	0.00							
190									
Packaging	Memo	0.00							
Packaging									
200	QC21- Final Inspection - Work Order Release	0.00							
200									
QC	Memo	0.00							
Quality Control									

6/2/10 (10)

12/15/16 *[Signature]*
MLJ 12/05/15

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Wednesday, May 02, 2012 2:42:44 PM

Page 1

Work Order ID: 84097

84097

Parent Item: D3499-2

D3499-2

Parent Item Name: Mounting Plate

Start Date: 5/2/2012

Required Date: 5/8/2012

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP Rev: A New Issue 06-05-05 JLM
IPP Rev: B As per Rev B 06-08-31 JLM
revC DD 10.02.23 verified by: EC

IPP Rev: C as per dwg

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M6061T6S.125

Purchased

No

100

sf

100.6500

1.068

8.993684

11

M6061T6S 125

**

1312-5-C

6061-T6 .125 Sheet

Location

Loc Qty

Loc Code

MAT021

100.65

120218

2.71

121473

97.94

121473

10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	84097
Description: Mounting Plate		Part Number:	D3499-2
Inspection Dwg: D3499 Rev: B		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
51.000	+/-0.010	51.000	✓		T Rul	
48.500	+/-0.010	48.500	✓		T Rul	
Ø0.201	+0.005/-0.001	.203	✓		V	
25.500	+/-0.010	25.500	✓		T	
Ø0.220 x 0.38	+/-0.030	.221 x .377	✓		V	
2.500	+/-0.010	2.500	✓		V	
3.016	+/-0.010	3.024	✓		V	
0.500	+/-0.010	.502	✓		V	
R0.25	+/-0.010	.25	✓		R G	
Ø0.500	+0.006/-0.001	.500	✓		V	
0.125	+/-0.010	.123	✓		V	

Measured by: JB	Audited by: S	Prototype Approval:	N/A
Date: 12-5-07	Date: 17/05/07	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	06.06.22	New Issue	KJ/JLM	
B	06.08.31	Dimensions updated per D3499 Rev. B	KJ/JLM	
C	09.05.04	Dimensions updated	KJ/DD	

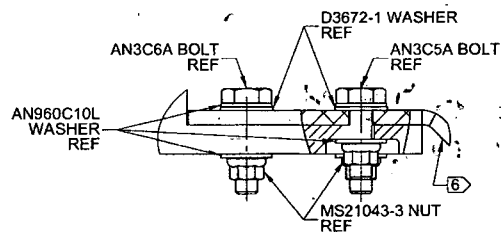
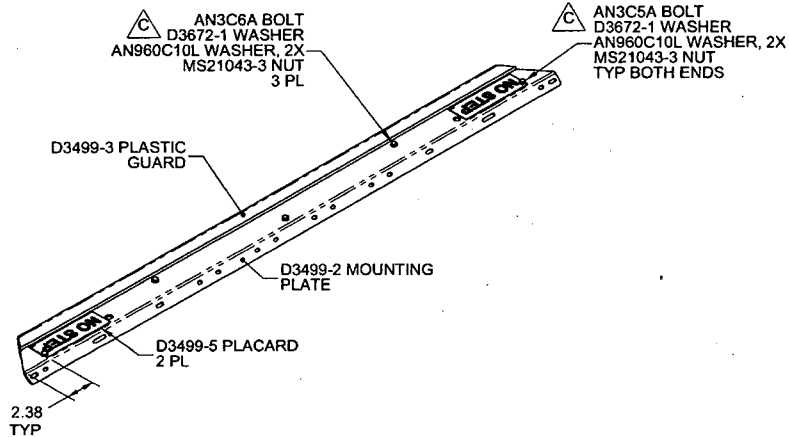
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

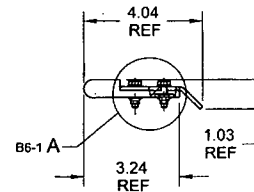
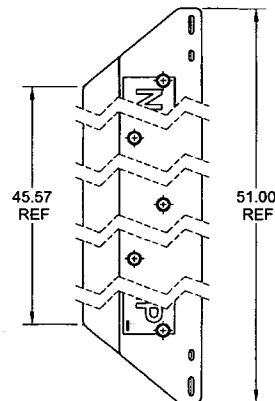
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DETAIL A B4-1
SCALE 4X



D3499-042 CABLE GUARD ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3499-041/-042" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 3.90 lbs

ITEM	QTY -042	P/N	DESCRIPTION
1	X	D3499-042	CABLE GUARD ASSEMBLY
2	1	D3499-2	MOUNTING PLATE
3	1	D3499-3	PLASTIC GUARD
4	2	D3499-5	PLACARD
5	2	AN3C5A	BOLT
6	3	AN3C6A	BOLT
7	10	AN960C10L	WASHER
8	5	MS21043-3	NUT
9	5	D3672-1	WASHER

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 84097 112052

RELEASED
2010-02-02
ND

C	DRAWING UPDATED TO CURRENT STANDARDS. 3.24 WAS 3.25 (ZN B8-9); 3.24 WAS 3.25 (ZN D3-3); REVISE TOLERANCE & 2.01 WAS 2.00 (ZN D3-3); D3672-1 WAS NAS1515H3L (ZN D3-1, D5-1, D7-1); ADD IDENTIFY NOTE (ZN A8-1); REF NCR-09-045	RF	09.06.19
B	RE-DESIGN D3499-2F/-3	MB	06.08.15
A	NEW ISSUE	MB	06.04.11
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN	R		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.06.19		

DART AEROSPACE USA, INC.
PORT HADLOCK, WA

DRAWING NO. **D3499** REV. C
SHEET 1 OF 4
TITLE **CABLE GUARD** SCALE NTS

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

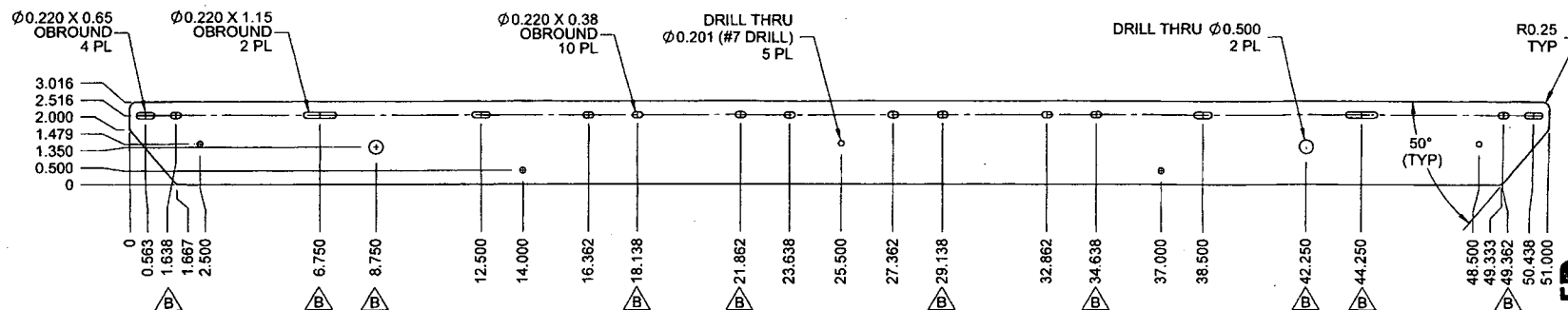
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

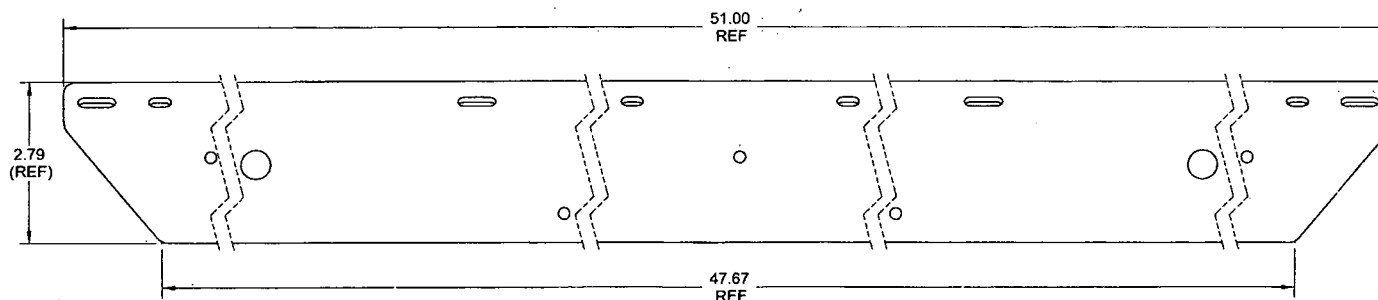
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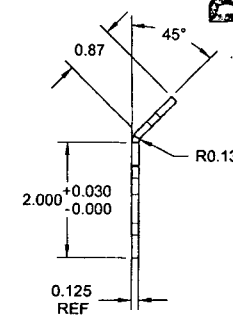
8 7 6 5 4 3 2 1



D3499-2F MOUNTING PLATE FLAT PATTERN
SCALE 0.5X



D3499-2 MOUNTING PLATE



**D3499-2 BENDING
DETAIL**

NOTES:

- 1) MATERIAL: 6061-T6 ALUMINUM SHEET 0.125 THICK
PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209
REF. DART SPEC. M6061T6S.125
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE" (4.3.5.2) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.81 lbs

84097

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3499	SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		CABLE GUARD	NTS
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R 2010-02-02

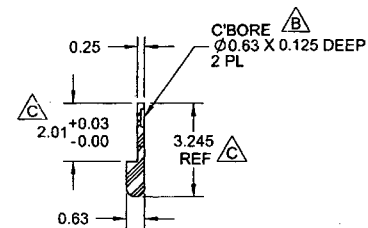
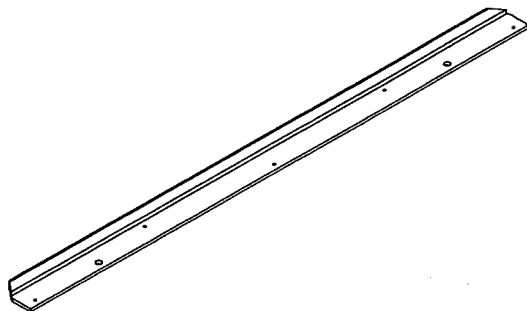
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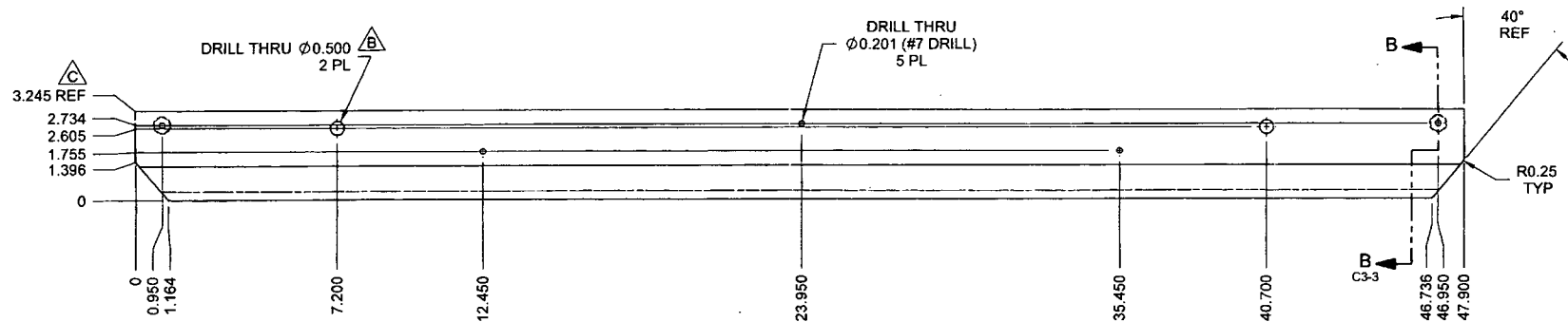
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NOTE: Date & initial all entries



SECTION B-B B2-3



D3499-3 CABLE GUARD

NOTES:

- 1) MATERIAL: UHMW BLACK TIVAR 1000 VIRGIN MATERIAL
REF. MUHMWB
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 2.52 lbs

84097

RELEASED
2010-02-02

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MFG. APPR.	RF	D3499	SHEET 3 OF 4
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Dart Aerospace Ltd

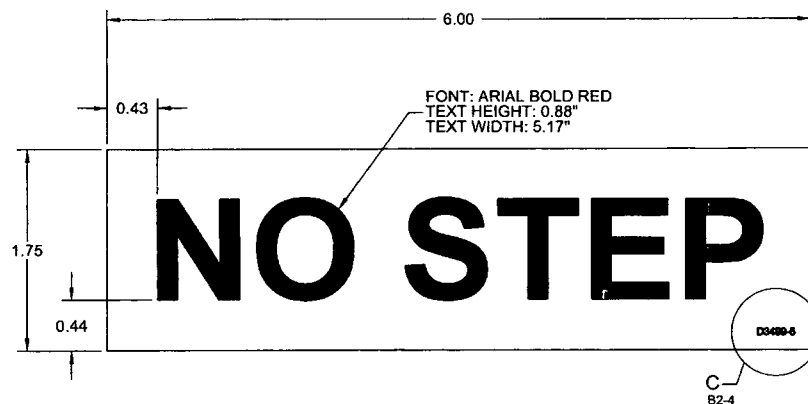
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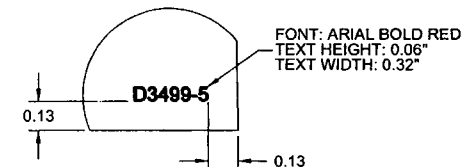
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NOTE: Date & initial all entries



D3499-5 PLACARD



DETAIL C B5-4
SCALE 2X

NOTES:

- 1) MATERIAL: RED LETTERS ON WHITE ADHESIVE BACK VINYL
MANUFACTURED FROM 3M 7 MIL MASKING FILM #8522CP OR
AVERY IPM #2031. SIZE IS 6.00" LONG" x 1.75" WIDE
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A

84097

RELEASED
2010-02-03
MB

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	RF	DRAWING NO. D3499	REV. C
MFG. APPR.	RF	SHEET 4 OF 4	
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